

FINAL

ENVIRONMENTAL ASSESSMENT

AND

REGULATORY IMPACT REVIEW

FOR A

FINAL RULE

TO ADJUST THE NORTH AND SOUTH ATLANTIC SWORDFISH
COMMERCIAL QUOTAS

May 2006

United States Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Office of Sustainable Fisheries
Highly Migratory Species Management Division
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Final Rule to Adjust the North and South Atlantic Swordfish Commercial Quotas

Framework Adjustment to the Fishery Management Plan for Atlantic Tunas, Sharks, and Swordfish

- Final Actions:** Consistent with ICCAT recommendations, extend the 2005 North Atlantic swordfish management measures and carryover the unharvested quotas from the 2004 fishing year into the 2005 fishing year for North and South Atlantic Swordfish.
- Type of Statement:** Final Rule Documents: Environmental Assessment and Regulatory Impact Review
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- Abstract:** The United States is obligated under the Atlantic Tunas Convention Act (ATCA) to implement conservation and management recommendations that have been adopted by the International Commission for the Conservation of Atlantic Tunas (ICCAT). These regulations extend the 2005 North Atlantic swordfish quota pursuant to the 2004 ICCAT recommendation (04-02) and carry over the unharvested quotas from the 2004 fishing year to the 2005 fishing year for North and South Atlantic swordfish. This rule is necessary to ensure compliance with the Atlantic Tunas Convention Act (ATCA), specifically, continued progress toward the conservation goals of ICCAT for Atlantic Highly Migratory Species (HMS). Short-term economic impacts resulting from these actions are not expected to be significant.

**FINDING OF NO SIGNIFICANT ENVIRONMENTAL IMPACT
TO ADJUST THE NORTH AND SOUTH ATLANTIC SWORDFISH
COMMERCIAL QUOTAS**

National Marine Fisheries Service
May 2006

The HMS Management Division of the Office of Sustainable Fisheries submits the attached Environmental Assessment (EA) to extend the 2005 management measures for North Atlantic swordfish until ICCAT provides a recommendation for a new U.S. allocation and to carry over unharvested quota from the 2004 to 2005 North and South Atlantic swordfish fishery for Secretarial review under the procedures of the Magnuson-Stevens Fishery Conservation and Management Act. This EA was developed as an integrated document that includes a Regulatory Impact Review (RIR). Copies of the final rule and the EA and RIR are available from NMFS at the following address:

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The EA considers information contained in the Environmental Impact Statement (EIS) associated with the 1999 Final Fishery Management Plan for Atlantic Tunas, Swordfish and Sharks (1999 FMP), the 2005 Stock Assessment and Fishery Evaluation (SAFE) report, and the EA prepared for the November 23, 2004, final rule (69 FR 68090) implementing ICCAT's 2002 recommendations for North and South Atlantic swordfish. All information used is herein incorporated by reference.

National Oceanic and Atmospheric Administration Administrative Order 216-6 (NAO 216-6) (May 20, 1999) contains criteria for determining the significance of the impacts of an action. In addition, the Council on Environmental Quality regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant to making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQs "context" and "intensity" criteria.

These include:

1. Can the action be reasonably expected to jeopardize the sustainability of any target species that may be affected by the action?

No. This action increases the 2005 North and South Atlantic swordfish quotas to carry over the underharvest from the 2004 fishing year and extend the 2005 North Atlantic swordfish management measures pursuant to a 2004 ICCAT recommendation (04-02). In 2002, ICCAT established an overall total allowable catch (TAC) (10,451 mt dw) for the North Atlantic swordfish that has greater than 50 percent chance of allowing the stock to rebuild to MSY by the end of 2009. There is no reliable estimate of stock status for South Atlantic swordfish at this time. The measures are consistent with the ICCAT recommendation and the overall TAC. Additionally, NMFS has implemented a number of restrictions on the pelagic longline fleet, the primary fleet fishing for swordfish, over the past several years, including time/area closures, that have contributed to quota underharvests. Accordingly, fishing effort is not likely to increase at this time; and therefore these actions are not expected to jeopardize the sustainability of the North or South Atlantic swordfish stock in 2005 and 2006.

2. Can the action be reasonably expected to jeopardize the sustainability of any non-target species?

No. The pelagic longline fleet has several management measures restricting effort and harvest (i.e., time/area closures, circle hook requirements, upgrading restrictions, limited access permits). NMFS does not expect the action to jeopardize the sustainability of any non-target species due to the management restrictions, reduced effort, and the increasing unharvested quota since 2000. NMFS does not intend to change the current restrictions on the pelagic longline fishery during the 2005 or 2006 fishing year.

3. Can the action be reasonably expected to allow substantial damage to the ocean and coastal habitats and/or essential fish habitat (EFH) as defined under the Magnuson-Stevens Act and identified in FMPs?

No. The action would predominantly impact the pelagic longline fleet. Pelagic longline gear is suspended in the water column and does not touch the bottom substrate. Because of the nature of the fishing gear, it is unlikely that it would alter the habitat for prey species. Additionally, as these actions are not expected to change fishing practices or effort, this action is not expected to change the impact of pelagic longline gear on EFH.

4. Can the action be reasonably expected to have a substantial adverse impact on public health and safety?

No. Like all offshore fisheries, pelagic longlining can be dangerous. Fishermen have pointed out that due to decreasing profit margins, they may have to fish with less crew or less experienced crew or may not have the time or money to complete necessary maintenance tasks. NMFS encourages fishermen to be responsible in fishing and maintenance activities. Safety factors were considered in selecting the final action, and NMFS has concluded that the final measures are not likely to affect safety at sea.

5. Can the action be reasonably expected to have an adverse impact on endangered or threatened species, marine mammals, or critical habitat of these species?

No. NMFS does not expect the final measures to have an adverse impact on endangered or threatened species, marine mammals, or critical habitat of these species because an increase in fishing effort is not likely to result from carrying over the 2004 underharvest for both North and South Atlantic swordfish to the 2005 fishing year or from extending the 2005 management measures for the North Atlantic swordfish fishery. Further, the number of sea turtle takes is not expected to increase due to the sea turtle release equipment with specified sea turtle handling and release protocols and circle hook regulations for the pelagic longline fleet.

6. Can the action be expected to have a substantial impact on biodiversity and ecosystem function within the affected area (e.g. benthic productivity, predator-prey relationships, etc.)?

No. The final action is not expected to have a substantial impact on biodiversity and ecosystem function because an increase in effort is not likely, restrictions on pelagic longline gear remain the same, and the quota has not been fully harvested for a number of years.

7. Are significant social or economic impacts interrelated with significant natural or physical environmental effects?

No. NMFS does not expect any significant social or economic impacts from increasing the 2005 baseline quota to carry over the 2004 underharvest because NMFS does not expect effort to increase given the current restrictions on the fishery. Based on the underharvests of the past several years, NMFS does not expect the entire available quota in 2005 or 2006 to be utilized in the near future, thus the full potential economic and social benefits are not likely to be realized from these actions.

8. To what degree are the effects on the quality of the human environment expected to be highly controversial?

No. The effects on the quality of the human environment are not controversial. Due to the number of restrictions (e.g. closed areas and circle hooks) on the pelagic longline fishery, the predominant gear targeting swordfish, the fishery has not been able to harvest the entire North and South Atlantic swordfish quota since 2000. NMFS received six comments on the proposed rule and none on the draft Environmental Assessment. The comments on the rule were concerned about swordfish stock status and revitalization of the commercial swordfish fishery. Based on the public comments and the current management measures, increasing the swordfish quota and establishing a quota for the upcoming fish year(s) are not controversial actions.

9. Can the action be reasonably expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas?

No. This final action does not apply to any of the unique areas listed.

10. To what degree are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

The final action is not likely to be highly uncertain or involve unique or unknown risks. NMFS does not intend to change the current pelagic longline management measures (i.e., time/area closures, circle hook requirements, upgrading restrictions, limited access permits) and the fishery has harvested only a small proportion of the North or South Atlantic fishery quota for the past several years; therefore an increase in the 2005 quotas or the extension of the 2005 management measures is not likely to alter the status of the current fishery.

11. Is the action related to other actions with individually insignificant, but cumulatively significant impacts?

These final measures are in keeping with management recommendations from the 2002 meeting of ICCAT for the North and South Atlantic swordfish stocks, and the 2004 recommendation for the North Atlantic swordfish stock. Taking into consideration the management measures implemented through the 1999 HMS FMP, the August 2000 bycatch and time/area rule, and the July 2004 rule implementing the Biological Opinion measures, NMFS expects no adverse cumulative impacts from this final action. NMFS does not intend to alter the current restrictions on the pelagic longline (PLL) fishery during either 2005 or 2006 fishing year; therefore, an increased quota is not expected to increase effort. Due to the impact of Hurricanes Katrina and Rita on the fishing industry in the Gulf of Mexico, effort in this area is not likely to increase during 2005 or due to the extension of the 2005 management measures. The final action, when considered with previous and reasonably foreseeable actions, is not individually significant and is not expected to result in cumulatively significant impacts.

12. Is the action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

This final action would not adversely affect any of the locations listed.

13. Can the action be reasonably expected to result in the introduction or spread of a non-indigenous species?

No. The final action modifies the North and South Atlantic swordfish quotas, and therefore would not result in the introduction or spread of any non-indigenous species.

14. Is the action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

No. Extending the 2005 North Atlantic swordfish management measures is a temporary measure until a stock assessment is completed and ICCAT develops new recommendations, which is likely to occur in the Fall of 2006. It would be precedent setting to not take action to carry over the underharvest to the 2005 North and South Atlantic swordfish quotas, and would not be compliant with ATCA or the 1999 FMP.

15. Can the action be reasonably expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

No. NMFS has determined that these regulations will be implemented in a manner consistent to the maximum extent practicable with the enforceable policies of those coastal states on the

Atlantic including the Gulf of Mexico and Caribbean that have approved coastal zone management programs. This determination was submitted for review by the responsible state agency(ies) on January 31, 2006, when the proposed rule was filed with the Federal Register, under section 307 of the CZMA. New Hampshire, Delaware, Virginia, North Carolina, Georgia, Florida, and Mississippi concur with the Agency's consistency determination for this action. The remaining states have provided no response, therefore consistency has been presumed.

16. Can the action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

No. Cumulative adverse effects on the target or non-target species are not expected because NMFS has no intention of modifying the current restrictions on the pelagic longline fleet during 2005 or 2006, effort is not expected to increase, and the quota has not been fully harvested for several years.

DETERMINATION

In view of the information presented in this document and the analysis contained in the attached Environmental Assessment for a final rule to adjust the 2005 North and South Atlantic swordfish quotas and extend the 2005 North Atlantic swordfish management measures, it is hereby determined that this action would not significantly impact the quality of the human environment as described above and in the Environmental Assessment. In addition, all impacts to potentially affected areas, including national, regional and local, have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.

Approved:

William T. Hogarth, Ph.D.
Assistant Administrator for Fisheries

Date

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1.0 PURPOSE AND NEED FOR ACTION

1.1. Management History

The U.S. fishery for North and South Atlantic swordfish is managed by the National Marine Fisheries Service (NMFS) under the authority of the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act) and the Atlantic Tunas Convention Act (ATCA). The United States is obligated under the ATCA to implement ICCAT-approved recommendations. The measures in this rulemaking were recommended by ICCAT during the fall of 2002 and 2004. In addition to ICCAT recommendations, swordfish management measures must be consistent with the Magnuson-Stevens Act, the Endangered Species Act (ESA), and other domestic laws. For additional information about the management history of the North and South Atlantic swordfish stocks, please refer to the Draft Consolidated Atlantic Highly Migratory Species Management Plan (Draft HMS FMP) (NMFS, 2005b).

1.2. Need for Action and Objectives

The purpose of this framework action is to implement the 2004 ICCAT recommendation (04-02) to extend the 2005 management measures for North Atlantic swordfish consistent with the 1999 HMS FMP, Magnuson-Stevens Act, ATCA, and other domestic regulations. ICCAT's 2002 swordfish recommendations established South Atlantic swordfish management measures through 2006 and North Atlantic swordfish management measures through the 2005 fishing year. A new stock assessment for North Atlantic swordfish was to be completed in 2005, and based on those results, ICCAT was to develop new management recommendations for North Atlantic swordfish. The stock assessment was delayed and the previous recommendation did not establish a TAC for the 2006 fishing year or beyond. In the interim, ICCAT recommended an extension on the existing 2005 management measures until the 2006 stock assessment was complete. Pending completion of the stock assessment (expected September 2006), ICCAT will likely review the results during the November 2006 meeting and develop new management recommendations. As a contingency to receiving no new allocation this year, this action extends the 2005 North Atlantic swordfish management measures until ICCAT provides a recommendation for a new U.S. allocation of the North Atlantic swordfish total allowable catch.

In addition to extending the 2005 North Atlantic swordfish management measures, this action carries forward the unharvested North and South Atlantic swordfish quotas from the 2004 fishing year to the 2005 fishing year pursuant to the 2002 ICCAT recommendation (02-02), which allows for the excess annual quota to be added to the respective quota during or before the adjustment year. The North and South Atlantic swordfish fishing year is from June 1 through May 31. Because the 2005 fishing year is underway, any unharvested quota from the 2005 fishing year will be considered in a separate action.

In this EA/RIR, NMFS considers the biological, social, and economic impacts of implementing the 2004 ICCAT recommendations for North Atlantic swordfish and carrying over the unharvested quota of North and South Atlantic swordfish into the 2005 fishing year based on reviews of landings, logbook, and observer data. The preferred alternatives and regulations are in accordance with the National Environmental Policy Act (NEPA) and other applicable laws. The preferred alternative has been selected due to its consistency with the objectives of the 1999

HMS FMP, the Magnuson-Stevens Act, ATCA, and the 2004 ICCAT recommendation for North Atlantic swordfish rebuilding and South Atlantic swordfish management.

2.0 SUMMARY OF THE ALTERNATIVES

This section provides a summary and basis for the alternatives considered in this rulemaking. The selected measure in this rulemaking is consistent with previous recommendations from the 2002 ICCAT meeting and implements a recommendation from the 2004 ICCAT meeting. Under ATCA and the Magnuson-Stevens Act, NMFS is required to implement ICCAT recommendations to manage U.S. fisheries. Maintaining compliance with the ICCAT management measures and implementing alternatives that reflect the best available science serves as the bases for the selected alternative, 2. The No Action alternative addresses the impacts if the ICCAT recommendation is not implemented.

Not Selected At This Time

Alternative 1: *No Action*

This alternative would maintain the status quo, keeping both the North and South Atlantic swordfish quotas at the levels implemented for the 2005 fishing year, 2,937.6 mt dw and 75.2 mt dw, respectively. This alternative would not carry over the underharvest from the 2004 fishing year as is allowed under the 2002 ICCAT recommendation (02-02). Additionally, the current regulations for North Atlantic swordfish implement a quota for 2004 and 2005, but do not implement a quota for the upcoming 2006 fishing year. Maintaining the status quo would mean that there would be no quota allocation for the North Atlantic commercial or recreational fisheries.

Selected Alternative

Alternative 2: *Extend the 2005 North Atlantic Swordfish Quota and Carry Over the Underharvest from the 2004 Fishing Year into the 2005 Fishing Year*

This alternative will carry over the unharvested quota from the 2004 fishing year, increasing the 2005 North Atlantic swordfish quota to 6,336.1 mt dw and the 2005 South Atlantic swordfish quota to 409.5 mt dw (Table 1). Additionally, this alternative implements ICCAT recommendation 04-02, which extends the 2005 North Atlantic swordfish management measures. While the ICCAT recommendation extends the 2005 North Atlantic swordfish managements through the 2006 fishing year, this action extends the 2005 management measures until ICCAT provides a recommendation for a new U.S. allocation of the North Atlantic swordfish total allowable catch. ICCAT will likely review the latest stock status for North Atlantic swordfish during the November 2006 meeting and provide new management recommendations based on the stock assessment results. This alternative is a contingency to receiving no new allocation recommendation from ICCAT this year.

Table 2.1: Landings and Quotas for the Atlantic Swordfish Fisheries (2003 - 2006).

North Atlantic Swordfish Quota (mt dw)		2003 preliminary	2003 final	2004 preliminary	2005 preliminary	2006 preliminary
Baseline Quota		2,915.0	2,915.0	2,937.6	2,937.6	2,937.6
Quota Carried Over		1,348.6	1,348.6	2,275.1	3,398.5	TBD
Total Quota		4,263.6	4,263.6	5,212.7	6,336.1	2,937.6
Quota Allocation	Directed Category	3,824.5	3,824.5	4,792.4	5,934.6	2,554.9
	Incidental Category	300.0	300.0	300.0	300.0	300.0
	Reserve Category	139.1	139.1	120.3	101.5	82.7
Utilized Quota	Landings	1,509.0	1,822.5	1,475.0	TBD	TBD
	Reserve Transfer to Canada	18.8	18.8	18.8	18.8	18.8
Total Underharvest		2,735.8	2,422.3	3,718.9	TBD	TBD
Dead Discards	Allowance	60.0	60.0	0.0	0.0	0.0
	Actual Harvest	278.0	207.2	320.4	TBD	TBD
	Difference	-218.0	-147.2	-320.4	TBD	TBD
Carryover Available		2,517.8	2,275.1	3,398.5	TBD	TBD
South Atlantic Swordfish Quota (mt dw)		2003 preliminary	2003 final	2004 preliminary	2005 preliminary	2006 preliminary
Baseline Quota		75.2	75.2	75.2	75.2	90.2
Quota Carried Over		195.2	195.2	259.1	334.3	TBD
Total Quota		270.4	270.4	334.3	409.5	90.2
Landings		11.3	11.3	0.0	TBD	TBD
Carryover Available		259.1	259.1	334.3	TBD	TBD

3.0 DESCRIPTION OF AFFECTED ENVIRONMENT

Detailed descriptions of the life histories and population status of the species managed by NMFS are given in the Draft Consolidated HMS FMP (NMFS, 2005b), and are not repeated here. Detailed information on catch and bycatch of HMS by fishery is also provided in the 2005 SAFE Report (NMFS, 2005a).

3.1 Status of the Stocks

North Atlantic Swordfish

North Atlantic swordfish are considered overfished. In 1999, the assessment of the North Atlantic swordfish stock indicated that the decline in stock biomass had been slowed or arrested (SCRS, 1999). ICCAT noted positive signs from the fishery in terms of catch rates, and concluded that the observed high recruitment of age one fish in 1997 and 1998 should allow for increases in spawning stock biomass in the future, if these year classes are not heavily harvested. Prior to the 2002 meeting, ICCAT conducted another stock assessment examining North Atlantic swordfish. The SCRS concluded that the 2002 stock assessment indicated that the stock could support an increase in the TAC of North Atlantic swordfish. According to the stock assessment, the biomass at the start of 2002 was estimated to be 94 percent of the biomass needed to produce MSY. The SCRS felt that there was a greater than 50 percent chance that a TAC of 10,451 mt dw would allow the stock to rebuild to MSY by the end of 2009. A new stock assessment for North Atlantic swordfish is scheduled for 2006.

South Atlantic Swordfish

South Atlantic swordfish are considered fully fished and overfishing may be occurring. The SCRS conducted a stock assessment of South Atlantic swordfish in 2002. Due to discrepancies between several of the datasets, reliable stock assessment results could not be produced. In general, the SCRS noted that the total catches have decreased since 1995 as recommended. Based on this information, significant changes in the management regime were not required. A new stock assessment for South Atlantic swordfish is scheduled for 2006.

3.2. Fishery Participants, Gear Types, and Affected Area

Additional information about the operation of U.S. HMS fisheries can be found in the 2005 SAFE Report (NMFS, 2005a). For detailed information about the operation of, international and domestic management of, and permitting and reporting requirements for the various commercial swordfish fisheries (pelagic longline, handgear, and other gears), as well as the HMS recreational fishery, please refer to the Draft Consolidated HMS FMP (NMFS, 2005b).

3.3. Habitat

The 2005 SAFE Report and the Draft Consolidated HMS FMP address the habitat utilized by the various species targeted by the pelagic longline fishery. Typically, the fisheries targeting swordfish exist off-shore in deep water, so there is no interaction with bottom substrate or other essential fish habitat.

3.4. Protected Species

For the most recent information on Biological Opinions (BiOps) for HMS fisheries and specifically the pelagic longline swordfish fishery, please refer to the Draft Consolidated HMS FMP (NMFS, 2005b). The Draft Consolidated HMS FMP also provides a description of the Reasonable and Prudent Measures and Terms and Conditions implemented pursuant to the BiOps for sea turtles. Additionally, the Draft HMS FMP discusses marine mammal interactions with HMS fisheries and the impact of the Marine Mammal Protection Act (MMPA) on HMS management.

4.0 ENVIRONMENTAL CONSEQUENCES OF ALTERNATIVES CONSIDERED

NMFS is required to implement ICCAT recommendations under ATCA, if the United States accepts those recommendations. The final measures discussed below satisfy the United States' obligation to implement the binding conservation and management measures that have been adopted by ICCAT. The final measures are also consistent with the goals of the 1999 HMS FMP, specifically, to prevent overfishing and rebuild overfished fisheries. The environmental and economic consequences of the selected alternative are briefly described below and in greater depth in the EA prepared for the 2004 swordfish rule (69 FR 68090; November 23, 2004).

4.1. North and South Atlantic Swordfish Quota Levels

As described in Section 2, the alternatives considered for the Atlantic swordfish quota levels are:

1: No Action

2: *Carry over Unharvested Quota from the 2004 fishing year and Extend the 2005 North Atlantic Swordfish Quota (preferred)*

Ecological Impacts

NMFS does not expect adverse ecological impacts from either alternative 1 or 2. Currently, North Atlantic swordfish are classified as overfished; however, the ICCAT Standing Committee on Research and Statistics' (SCRS) 2002 stock assessment found that the biomass of this population has almost recovered to MSY. The best available science indicates that the basin-wide TAC of 10,451 mt dw has a 50 percent probability of recovering the stock to MSY by 2009. Adjusting the U.S. quota from 2,937.7 mt dw to 6,336.1 mt dw in 2005 to compensate for the underharvest in the 2004 fishing year would be in keeping with the rebuilding plan and maintains the ICCAT for North Atlantic swordfish TAC during the rebuilding period. Extending the 2005 management measures maintains the international rebuilding plan until updated information is available. The SCRS is expected to complete a stock assessment in 2006.

The ecological impacts of adopting alternative 2 will vary based on the fishing effort of the U.S. pelagic longline fishery. Currently, the pelagic longline fleet has been unable to catch the entire U.S. swordfish quota causing significant amounts to be carried over to the following fishing year. The decrease in effort can be attributed to the time and area closures implemented in 1999, 2000, and 2001 to reduce bycatch; vessel upgrading restrictions; incidental category catch limits; and limited access. Due to the underharvests in this fishery, NMFS does not believe the increased 2005 quota will cause any adverse ecological impacts. Extending the baseline 2005 quota until ICCAT provides a new U.S. allocation is also not expected to have any adverse ecological impacts because of the many restrictions placed on the pelagic longline fishery. If restrictions were relieved, it is possible that effort could increase, but NMFS does not intend to alter the current restrictions in this action and any other changes would be fully analyzed in a future action. This potential increase in effort could result in fishermen landing more of the swordfish quota, and also have a negative impact on non-target species and protected species. However, at this time, NMFS feels that fishing effort is not likely to increase with current restrictions (i.e., time/area closures and limited access).

An estimated 994 loggerhead and 1,016 leatherback sea turtle mortalities occurred in 1999 and 766 loggerhead and 1,072 leatherback sea turtle mortalities in 2004 (NMFS, 2005b). Also, an estimated 164 marine mammals mortalities occurred in the pelagic longline fishery in 2004 (NMFS, 2005b). Dead discards of swordfish, sailfish, blue and white marlin, and several shark species decreased in 2003 compared to 1999. NMFS does not expect this action to increase the level of sea turtle incidental mortalities because fishing effort is not likely increase with the increased quotas for North and South Atlantic swordfish or from extending the 2005 management measures for the North Atlantic swordfish fishery. Further, the number of sea turtle takes is not expected to increase due the current restrictions, such as the mandatory sea turtle release equipment, handling and release protocols, time/area restrictions, and circle hook regulations.

Social and Economic Impacts

NMFS does not expect any negative social or economic impacts from increasing the baseline 2005 quota to 6,336.1 mt dw from 2,937.7 mt dw to carry over the underharvest from the 2004 fishing year (2) compared to taking no action (1). There is a chance that economic benefits from the final measures could increase if effort increased. However, NMFS does not expect effort to increase given current regulations. Based on the average East coast 2003 ex-vessel price for North Atlantic swordfish of \$3.13 per pound (NMFS, 2005b), the increase, if fully harvested, would be worth about \$23.5 million in 2005 $[(6,336.1 \text{ mt dw} - 2,937.6 \text{ mt dw}) * 2204.6 * \$3.13]$. Using the same East Coast average ex-vessel price for the South Atlantic swordfish quota, the increase, if fully harvested, would be worth about \$2.3 million $[(75.2 \text{ mt dw} - 334.3 \text{ mt dw}) * 2204.6 * \$3.13]$. Additionally, this action extends the 2005 North Atlantic swordfish management measures until a new stock assessment is completed. Extending the 2005 North Atlantic swordfish management measures would effectively implement a quota of 2,937.7 mt dw for the 2006 fishing year. Without implementation of this ICCAT recommendation, there would be no quota in place for the 2006 North Atlantic swordfish fishery. With no quota in place, it could cost the pelagic longline (PLL) fishery as much as \$20.3 million in 2006 assuming the entire quota was harvested. Based on the underharvests of the past several years, NMFS does not expect the entire quota in 2005 or 2006 to be utilized in the near future, thus the full potential economic benefits are not expected to be realized. Further, as noted in Section 9, no social impacts are anticipated because effort most likely will not increase. Consequently, NMFS expects neither positive nor negative impacts on the pelagic longline fleet or dependent communities as a result of the preferred alternative.

Conclusion

Alternative 2 is consistent with ICCAT recommendations, Magnuson-Stevens Act, ATCA, and the 1999 HMS FMP. NMFS does not expect any significant negative ecological, economic, or social impacts from implementing the alternative.

4.2. Impacts on Essential Fish Habitat

As described in the Draft HMS FMP, pelagic longline gear is suspended in the water column and does not touch the bottom substrate (NMFS, 2005b). Because of the nature of the fishing gear and this final action is not expected to change fishing practices or effort, it is unlikely that it would alter the habitat for prey species or essential fish habitat.

4.3. Impacts on Other Finfish Species

As described in the sections above, the selected alternative is not expected to significantly alter fishing practices or effort because the quota has been under harvested for several years. Therefore, this alternative should not have any increased impact on other finfish species. As considered in the Draft Consolidated HMS FMP (NMFS, 2005b) and the 2004 rule, the bycatch of finfish species is not expected to increase because the effort in the North and South Atlantic swordfish fishery is low. Effort is not expected to increase because of the current management restrictions for pelagic longline gear (i.e., time/area closures, limited access, and circle hooks). This action does not modify the current pelagic longline restrictions.

4.4. Impacts on Protected Species Listed under the Endangered Species Act or Marine Mammal Protection Act

As described in this section, the final measures are not expected to alter fishing practices or effort because the quota has been underharvested for several years. Thus, NMFS believes that these measures do not change the conclusion of, nor would they result in effects that have not been considered in, the June 2004 and June 2001 BiOps. Similarly, the selected alternative is not expected to change the number or rate of interactions with marine mammals. The Office of Sustainable Fisheries consulted with Office of Protected Resources and asked for their concurrence with the determination that this action is not likely to further impact endangered species or marine mammals. The Office of Protected Resources determined that no further impacts to ESA-listed species beyond that considered in previously concluded consultations are expected. Although the 2005 quota is being increased as required to account for the underharvest in previous years, the capacity of the swordfish fleet has not increased and no new or increased effort is expected. The existing BiOps for the swordfish fisheries (rod and reel covered under the June 2001 Atlantic HMS Fisheries BiOp; pelagic longline covered under the June 2004 HMS Pelagic Longline BiOp), along their reasonable and prudent alternatives, reasonable and prudent measures, and terms and conditions, remain valid.

4.5. Environmental Justice Concerns

Executive Order 12898 requires that federal actions address environmental justice in the decision-making process. In particular, the environmental effects of the actions should not have a disproportionate effect on minority and low-income communities. The final measures would not have any effects on human health. Additionally, the final measures are not expected to have any social or economic effects and should not have a disproportionate effect on minority and low-income communities.

4.6. Coastal Zone Management Act Concerns

NMFS determined that these regulations will be implemented in a manner consistent to the maximum extent practicable with the enforceable policies of those Atlantic, Gulf of Mexico, and Caribbean coastal states that have approved coastal zone management programs. This determination was submitted for review by the responsible state agencies on January 31, 2006, when the proposed rule was filed with the Federal Register, under section 307 of the CZMA. New Hampshire, Delaware, Virginia, North Carolina, Georgia, Florida, and Mississippi concur with the Agency's consistency determination for this action. The remaining states have provided no response, therefore consistency has been presumed.

4.7. Comparison of Alternatives

Table 4.1 Comparison of Proposed Alternatives. This table compares the impacts of the alternatives considered in this action. The symbols +, -, 0 refer to positive, negative, and zero impacts respectively. Minor impacts and impacts that are possible but unlikely are noted with + or -. Moderate impacts are noted with ++ or --, and significant impacts are noted with +++ or ---. Refer to the preceding sections for details of the impacts of each alternative.

Management Measure	Ecological Impacts	Economic Impacts	Social Impacts
1	0	-	-
2: Preferred	0	0	0

4.8. Cumulative Impacts

The selected alternative is in keeping with management recommendations from the 2002 meeting of ICCAT for the North and South Atlantic swordfish stocks, and the 2004 recommendation for the North Atlantic swordfish stock (04-02). Taking into consideration the management measures implemented through the 1999 HMS FMP, the August 2000 bycatch and time/area rule, and the July 2004 rule implementing the BiOp measures, NMFS expects no adverse cumulative impacts from this rule. The previous actions were taken to reduce bycatch and bycatch mortality in the PLL fishery and contributed to quota underages for the both the North and South Atlantic swordfish quotas since 2000. The final measures are not expected to change current fishing practices or effort or to cause significant ecological, economic, and social impacts. Because NMFS is not altering the current restrictions on the PLL fishery, the increased quota is not expected to increase effort. Due to the impact of Hurricanes Katrina and Rita on the fishing industry in the Gulf of Mexico, the effort in this area is not likely to increase during the 2005 fishing year. NMFS will continue to monitor effort levels in the PLL fishery and will take action as needed if effort levels, or interactions with protected species or other bycatch, increase. In all, the final action continues to prevent overfishing or facilitate rebuilding of the stocks without significant adverse economic or social impacts.

There are several activities taking place in the foreseeable future which may have an impact on the management of North and South Atlantic swordfish. If the Draft Consolidated HMS FMP is finalized in 2006 as proposed, it is unlikely to change effort in the swordfish fishery. ICCAT is scheduled to conduct a stock assessment on North Atlantic swordfish during 2006. The results of the stock assessment may lead to new management recommendations, specifically new quota recommendations, from ICCAT. If effort continues to decrease in the swordfish fishery, NMFS may take action to revitalize the fishery, provided it does not increase protected species interactions.

5.0 MITIGATION AND UNAVOIDABLE ADVERSE IMPACTS

5.1. Mitigating Measures

This action does not include any new mitigating measures for increasing the 2005 North and South Atlantic swordfish quota and establishing the baseline North Atlantic swordfish quota for

the upcoming fishing year, but NMFS currently has several restrictions in place for the pelagic longline fishery, such as time/area closures, limited access permits, circle hook requirement, and sea turtle handling and release protocols. NMFS does not expect the selected alternative to have any major adverse ecological, economic, or social impacts because of the low fishing effort and unharvested quota for the past several years. Moreover, NMFS will continue to monitor the pelagic longline fishery and will take action if interactions with protected species, or other bycatch, increase.

5.2. Unavoidable Adverse Impacts

The final measures assist NMFS in achieving the objective of this rulemaking, ATCA, and the Magnuson-Stevens Act, but will have unavoidable adverse impacts, such as sea turtle and marine mammal bycatch and bycatch mortality. Because the selected measures are not expected to alter fishing practices or fishing effort, NMFS expects the bycatch and bycatch mortality of endangered species or marine mammals to be within the estimated mortalities of the incidental take statement considered in the June 2001 Biological Opinion (BiOp) on Atlantic HMS Fisheries and the June 2004 BiOp for the HMS pelagic longline fisheries.

5.3. Irreversible and Irretrievable Commitment of Resources

The selected alternative would assist NMFS in achieving the objective of this rulemaking, ATCA, and the Magnuson-Stevens Act and are not expected to have any irreversible or irretrievable commitments of resources.

6.0 ECONOMIC EVALUATION

This section primarily addresses the economic impacts of the preferred alternative for North Atlantic swordfish. This analysis concentrates on the commercial fishery because at this time the recreational fishery does not contribute significantly to total swordfish landings.

6.1. Number of Fishing and Dealer Permit Holders

The commercial fishery is comprised of fishermen who hold a swordfish directed, incidental, or handgear permit and the related industries including processors, bait houses, and equipment suppliers, all of which NMFS considers to be small entities. In October 2005, there were approximately 91 fishermen with a directed swordfish limited access permit, 189 fishermen with an incidental swordfish limited access permit, and 92 fishermen with a handgear limited access permit for swordfish. Not only does the number of permits continue to decline, but the number of active pelagic longline vessels is significantly less than the number of permits issued. In 2004, there were 390 commercial permit holders and 142 vessels reported landing swordfish commercially. Information on active vessels in 2005 is not yet available. However, anecdotal information indicates that effort was lower in the second half of 2005 due to the impacts of hurricanes Katrina and Rita on the pelagic longline fleet and the shoreside infrastructure. Because the pelagic longline fishery contributes most of the effort and catches most of the swordfish quota, the analyses in this section focus on that fishery. About 90 percent of the vessels reporting commercial swordfish landings used pelagic longline gear.

Additionally, the number of swordfish dealer permits has also declined from 321 permits in 2002 to 310 permits in 2005 (NMFS, 2005b). The primary concentration of dealers is in Florida, followed by California, Massachusetts, and New York. There are also U.S. swordfish dealers in Canada, Chile, New Zealand, and Ecuador.

6.2. Gross Revenue of Fishermen

The Table 6.1 is an excerpt from Table 3.65 in the Draft Consolidated HMS FMP showing the swordfish gross revenue trend from 1996 through 2003, as well as the average East coast swordfish ex-vessel price and weight (NMFS, 2005b). The values in Table 6.1 were adjusted for inflation using the Consumer Price Index and are shown in 2003 dollars.

Table 6.1 Swordfish Ex-vessel Price per Pound, Weight, and Revenue.

Swordfish*	1996	1999	2000	2001	2002	2003
Ex-vessel \$/lb dw	\$3.77	\$3.38	\$3.51	\$3.74	\$3.20	\$3.13
Weight lb dw	7,170,619	5,942,839	4,832,384	5,662,350	5,985,489	4,668,466
Fishery Revenue	\$27,033,234	\$20,104,498	\$16,974,346	\$21,153,927	\$19,150,819	\$14,600,627

* Estimates do not include dead discards.

6.3. Variable Costs and Net Revenues

For a recent description of some of the variable costs and net revenues for the pelagic longline fishery, please see Section 6.3 in Volume II of the Draft Consolidated HMS FMP (NMFS, 2005b). Beginning in 2003, NMFS initiated mandatory cost earnings reporting for selected vessels in order to improve the economic data available for all HMS Fisheries.

6.4. Expected Economic Impacts of the Alternatives Considered

The final alternative, 2, increases the 2005 baseline North Atlantic swordfish quota by 3,398.5 mt dw and the 2005 baseline South Atlantic swordfish quota by 334.3 mt dw. Assuming that these quota amounts can be fully caught in the 2005 fishing year and using the average East coast ex-vessel monetary value of the swordfish (\$3.13), the North Atlantic swordfish quota increase would be \$23.5 million and \$2.3 million for South Atlantic swordfish. The range in ex-vessel price can vary based on location and season. This represents a revenue increase of about 116 percent over the no action alternative (assuming the quota is fully harvested). However, given the unlikelihood that the pelagic longline fleet will be able to catch that amount, due to the current level of effort and recent underharvests, the economic benefit of the increased quota may not be realized. Thus, carrying over the 2004 underharvest to the 2005 fishing year is unlikely to change the economic benefits or cost to individual fishermen or communities. Alternative 2 also extends the 2005 management measures. Without implementation of this ICCAT recommendation, there would be no quota in place for the 2006 North Atlantic swordfish fishery. With no quota in place, it could cost the PLL fishery as much as \$20.3 million in revenue in 2006 assuming the entire quota was harvested.

In considering the preferred alternative, NMFS does not expect significant positive or negative economic impacts. Currently, the United States does not catch its entire quota. The net impact of the alternative results in a quota level that is greater than current catches. Because of restrictions already in place, NMFS does not expect current catches to increase. Thus, the overall economic impact is minimal.

7.0 REGULATORY IMPACT REVIEW

7.1. Description of the Management Objectives

Please see Section 1 for a description of the objectives of this rulemaking.

7.2. Description of the Fishery

Please see Section 3 and the Draft Consolidated HMS FMP for a description of the fisheries that could be affected by this rulemaking.

7.3. Statement of the Problem

Please see Section 1 for a description of the problem and need for this rulemaking.

7.4. Description of Each Alternative

Please see Section 2 for a summary of each alternative and section 4 for a complete description of each alternative and its expected ecological, social, and economic impacts.

7.5. Economic Analysis of Expected Effects of Each Alternative Relative to the Baseline

NMFS does not believe that the national net benefits and costs would change significantly in the long run as a result of implementing the selected alternative compared to the baseline of no action. The action considered addresses the 2005 fishing year and extends the 2005 management measure until new recommendations are available from ICCAT. For the 2005 fishing year, the present value of gross and net revenues for the swordfish fishery at the ex-vessel level could increase, but that would depend on the extent to which fishermen can expand their effort to catch the quota. Table 7.1 indicates possible changes as a result of each alternative. Alternative 1 maintains the status quo. Alternative 2 increases the 2005 North and South Atlantic swordfish quota due to the underharvest from the 2004 fishing year. Additionally, alternative 2 extends the 2005 North Atlantic swordfish management measures until new information on stock status and a new recommendation from ICCAT is available. Because the swordfish quota is not fully harvested each year and the number active permits remains about the same or is declining, the overall impact of these measures are expected to be minimal.

Table 7.1 Summary of benefits and costs for each alternative.

Management Measure	Net Economic Benefits	Net Economic Costs
1: No Action	<i>Long-term:</i> None. <i>Short-term:</i> No net economic benefit expected from not implementing the quota carryover or extension.	<i>Long-term:</i> Potentially lose quota allocation from ICCAT which limits potential to increase revenue. <i>Short-term:</i> Lose the potential value of the carryover and full quota if not extended beyond 2005
2: Adjust North and South Atlantic swordfish quota, and extend 2005 North Atlantic swordfish measures Selected	<i>Long-term:</i> Positive, option value of increased quota available in future. <i>Short-term:</i> None expected because effort is not expected to increase.	<i>Long-term:</i> None. <i>Short-term:</i> None expected because effort is not expected to increase.

7.6. Summary

Under E.O. 12866, an action is considered significant if the regulations result in a rule that may:

1. Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
2. Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
3. Materially alter the budgetary impacts of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
4. Raise novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in E.O. 12866.

The selected alternative described in this document and in the final rule do not meet the above criteria. Therefore, under E.O. 12866, the final rule is not a significant regulatory action.

8.0 COMMUNITY PROFILES

Mandates to conduct social impact assessments come from both the National Environmental Policy Act (NEPA) and the Magnuson-Stevens Act. The 1999 HMS FMP indicates that the following towns should be considered for in-depth analysis due to the importance of the pelagic longline fishery: Gloucester and New Bedford, Massachusetts; Barnegat Light, New Jersey; and Wanchese, North Carolina. Detailed information for each community can be found in the Draft HMS FMP and is not repeated here (NMFS 2005b). The anticipated impacts of the final action would be minor in all of these communities. Because the current quota is underharvested, there are no significant economic or social impacts expected from increasing the quota. However, if fishermen increase their effort in an attempt to increase their harvest, that could incur some social impacts such as increased time at sea, etc. NMFS feels that the active participants in this fishery are already expending a high amount of effort, so an increase in fishing effort would be unlikely.

9.0 OTHER CONSIDERATIONS

9.1 National Standards

The analyses in this document are consistent with the National Standards (NS) set forth in the 50 CFR part 600 regulations.

This final action is consistent with NS 1 in that, according to the latest stock assessment, it would prevent the overfishing of swordfish in the Atlantic Ocean. Because the alternatives are based on the results of the 2002 ICCAT SCRS stock assessment, the alternatives considered are based on the best scientific information available (NS 2), including self-reported, observer, and stock assessment data which provide for the management of the species throughout its ranges (NS 3). The preferred alternative does not discriminate against fishermen in any state (NS 4) nor does it alter the efficiency in utilizing the resource (NS 5). With regard to NS 6, the preferred alternative takes into account any variations that may occur in the fishery and the fishery resources. Additionally, NMFS considered the costs and benefits of these management measures economically and socially under NS 7 and 8 in sections 6, 7, 8, and 9 of this document. The final measures ensure that bycatch is accounted for in the Atlantic swordfish fisheries and that NMFS has considered the impact on protected species (NS 9). Finally, the final action would not require fishermen to fish in an unsafe manner (NS 10).

9.2 Paperwork Reduction Act

This action does not contain any new collection-of-information requirements for purposes of the Paperwork Reduction Act.

9.3 Federalism

This action does not contain regulatory provisions with federalism implications sufficient to warrant preparation of a Federalism Assessment under E.O. 13132.

10.0 LIST OF PREPARERS

This document was prepared by the Highly Migratory Species Management Division in the Office of Sustainable Fisheries, National Marine Fisheries Service. Individuals in other offices within NOAA contributed, including the Office of General Counsel.

11.0 LIST OF AGENCIES AND PERSONS CONSULTED

Discussions pertinent to formulation of the final action involved input from a variety of scientific and constituent interest groups including the U.S. delegation to ICCAT (including commercial and recreational fishermen, and environmental advocates), ICCAT's SCRS, ICCAT (35 member states), and staff from the International Fisheries Division of NMFS and the NOAA's General Counsel for Fisheries.

12.0 REFERENCES

- NMFS. 1999. Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks. U.S. Department of Commerce, National Oceanographic and Atmospheric Administration, Silver Spring, MD.
- NMFS. 2005a. Pre-Draft of the Atlantic Highly Migratory Species Fishery Management Plan , Including the Stock Assessment and Fishery Evaluation for Atlantic Highly Migratory Species. U.S. Department of Commerce, National Oceanographic and Atmospheric Administration, National Marine Fisheries Service, Silver Spring, MD.
- NMFS. 2005b. Draft Consolidated Atlantic Highly Migratory Species Fishery Management Plan. U.S. Department of Commerce, National Oceanographic and Atmospheric Administration, National Marine Fisheries Service, Silver Spring, MD.

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